

IN THE CLAIMS:

1. (Currently amended) A control unit for an internal combustion engine ~~including the three-way~~ having a three-way catalyst and HC adsorbent on an exhaust side ~~of the engine,~~

~~wherein said control unit being configured alternately controls the A/F to control air-fuel ratio (A/F) between a rich state and a lean state in order to quicken the activation of said three-way~~ three-way catalyst when upon starting ~~of said internal combustion engine starts.~~

2.-3. (Cancelled)

4. (Currently amended) A control unit for an internal combustion engine ~~including the three-way~~ having a three-way catalyst on an exhaust side ~~of the engine,~~

~~wherein said control unit has a~~ having means for detecting the temperature of said ~~three-way~~ three-way catalyst ~~directly or indirectly, and~~

~~wherein control unit being configured to alternately controls the A/F control air-fuel ratio (A/F) between a rich state and a lean state in order to quicken the activation of the three-way~~ three-way catalyst ~~when the if a~~ temperature of said three way three-way catalyst is a value within ~~the a~~ predetermined fixed range.

5. (Currently amended) A control unit for an internal combustion engine ~~including the three-way~~ having a three-way catalyst on an exhaust side ~~of the engine,~~

~~wherein said control unit has-a~~ having means for detecting the an operating state of the internal combustion engine, and

~~wherein control unit being configured to~~ alternately controls the ~~A/F control air-fuel ratio (A/F)~~ between a rich state and a lean state ~~in-order to~~ quicken the activation of ~~the three-way~~ said three-way catalyst based on the an operating state.

6. (Currently amended) A control unit for an internal combustion engine ~~including the three-way~~ having a three-way catalyst and HC adsorbent operatively arranged in order on an exhaust side ~~in the order of the engine,~~

~~wherein said control unit has-a~~ having means for detecting the a temperature of said HC adsorbent ~~directly or indirectly,~~ and

~~wherein control unit being configured to~~ alternately controls the ~~A/F control air-fuel ratio (A/F)~~ between a rich state and a lean state ~~in-order to~~ change the temperature of said HC adsorbent.

7. (Currently amended) The control unit ~~for an internal combustion engine~~ according to claim 6,

wherein said control unit is configured to alternately ~~controls~~ control the A/F between a rich state and a lean state when the temperature of said HC adsorbent is within the predetermined fixed range.

8. (Currently amended) A control unit for an internal combustion engine ~~including having~~ a catalyst ~~which has the three-way comprising a three-way catalyst and HC adsorbent in the same carrier on an exhaust side of the engine,~~

~~wherein said control unit being configured alternately controls the A/F to control air-fuel ratio (A/F) between a rich state and a lean state in order to change the a temperature of said HC adsorbent.~~